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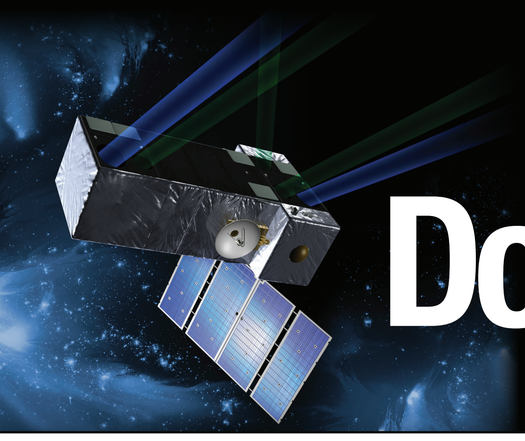

SIM Lite Astrometric Observatory

Double Blind Search for Earths -3

Phase 2 Test

- 60 planetary systems around candidate nearby FGK target stars (real potential target stars).
- All 60 from modeled systems, scaled for stellar luminosity.
- Systems contained 1 to 11 planets.
- Analysis teams jointly selected their best solutions to report. Teams were asked to report only those planets they considered publishable (see Poster 2 for definitions of *completeness* and *reliability*).

Scoring Category	Phase 2
Completeness: Terrestrial (T)	37/43
Completeness: Habitable Zone (HZ)	21/22
Completeness: Terrestrial in Habitable Zone	17*/18
Completeness: All Planets	63/70
Reliability: Terrestrial	38/39
Reliability: Habitable Zone (HZ)	20/20
Reliability: Terrestrial in Habitable Zone	16/16
Reliability: All Planets	66/68

*10 of the 17 T/HZ Phase-2 detected planets were in multiple-planet systems

Double-Blind Study Summary

- The study confirms the predicted astrometric exoplanet detection capability. SIM Lite capabilities can detect T/HZ planets, down to Earth mass, around the nearest (to our Sun) 60 FGK stars.
- Meets the astrometric mission recommendation of the AAAC Exoplanet Task Force.
- Terrestrial planets in the Habitable Zone are detected even in complex planetary systems.
- The accuracy achieved for period and mass, and other orbital parameters for planets in multiple-planet systems in most cases matches the predicted accuracy for an isolated planet.

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